significant effect on opioid overdose hospital admission. Given the lack of information in this field of research, especially when considering clinical outcomes, this is an important addition to the literature.

PMH66
MULTIMORBIDITY AND DEPRESSION TREATMENT

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**OBJECTIVES:** We estimate the rates and types of depression treatment among individuals with multimorbidity and depression and compare these to individuals without multimorbidity. We also examine the relationship between multimorbidity and depression treatment after controlling for demographic, socio-economic, access to care, life-style factors and the number of visits to either office-based provider or outpatient hospital clinics. **METHODS:** We did cross-sectional analysis of 1,376 individuals of age above 21, with depression and at least one chronic physical condition in the following clusters: cardio-metabolic (diabetes or heart disease or hypertension), respiratory (chronic obstructive pulmonary disease or asthma) and musculoskeletal (osteoarthritis or rheumatoid arthritis or osteoporosis) from the 2007 Medical Expenditure Panel Survey (MEPS). Chi-square tests, logistic regression and multinomial logistic regressions were performed to analyze the rates and types of depression treatment among various chronic clusters. All analysis accounted for the MEPS survey design. **RESULTS:** Of our study sample, 56.2% reported use of antidepressants, 21.4% had psychotherapy with or without antidepressants and 22.4% reported no depression treatment at all. The individuals in "respiratory only" and "musculoskeletal only" were less likely to be on antidepressants and those in "respiratory only" group were less likely to opt for psychotherapy with or without antidepressants in the unadjusted model. After adjusting for all demographic, socio-economic, access to care, life-style factors and number of visits, only those in "respiratory only" group were less likely to be treated with psychotherapy with or without antidepressants. **CONCLUSIONS:** Presence of multimorbidity is not a barrier to depression treatment suggesting that competing demands due to multimorbidity may not affect depression treatment. Also the individuals in 'respiratory only' group were less likely to be on psychotherapy. Therefore, further studies are needed to explore the relationship between psychotherapy for depression treatment and respiratory conditions.

PMH67
CO-PRESCRIBING CHOLINESTERASE INHIBITORS WITH ANTICHOLINERGIC URINARY INCONTINENCE MEDICATIONS

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**OBJECTIVES:** The objective of this study was to identify the national rates of co-prescribing cholinesterase inhibitors with anticholinergic urinary incontinence medications using the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS). Anticholinergic classes of medications have a mechanism of action that opposes the cholinesterase inhibitors; therefore, when taken concomitantly the effectiveness of these medications potentially decreases. The objective of this study was to describe the concomitant prescribing of cholinesterase inhibitors and anticholinergic drugs indicated for urinary incontinence. **METHODS:** This study was a retrospective, observational, cross-sectional, database analysis using data from the 2006-2008 NAMCS and NHAMCS outpatient departments. Patient visits that included a prescription for a cholinesterase inhibitor alone or combined with an anticholinergic medication approved for urinary incontinence were analyzed. The data was weighted to produce national estimates and analyzed using descriptive statistics. **RESULTS:** Over the 3 year period there were 13,345,926 visits including cholinesterase inhibitors. Of the visits including a cholinesterase inhibitor, 5.5% (n=737,064) also included a prescription of an anticholinergic urinary incontinence medication. The most commonly prescribed cholinesterase inhibitor was donepezil (n=11,173,472; 83.5%). The majority of patient visits that included the prescription of both a cholinesterase inhibitor and an anticholinergic medication were made by patients over 80 years of age (n=404,359; 54.9%). The most common physician specialty to prescribe both cholinesterase inhibitors alone (n=6,587,573; 49.2%) and the combination with an anticholinergic medication (n=333,135; 45.2%) were family practitioners and general practice/internal medicine. Urologists and obstetricians/gynecologists represented the prescribing physicians in 16.8% (n=123,465) of visits with combination therapy, whereas they accounted for 3.1% (n=415,818) of the cholinesterase inhibitor prescribing. **CONCLUSIONS:** Cholinesterase inhibitors and anticholinergic urinary incontinence medications were inappropriately prescribed together. Educating health care providers and patients about this potential interaction can optimize drug therapy for patients on cholinesterase inhibitors.

PMH68
FDA REGULATIONS AND ANTIDEPRESSANT UTILIZATION

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**OBJECTIVES:** Pharmacologic treatment has a major role in the management of depression, but concerns about the safety of antidepressants, and in particular the increased risk of suicide, have prompted FDA blackbox warnings. The objective of this analysis was to describe the trends in utilization of prescription antidepressants over the past decade and interpret these in the context of FDA actions over that same time period. **METHODS:** National prescription data were obtained from IMS Xponent™ database for the period January 1999-December 2009 (inclusive). Total prescription counts were determined for TCAs, SSRIs, and SNRIs. The FDA website was reviewed to identify the dates of new warnings or safety-related labeling changes, including major warnings in 2004 and 2007. **RESULTS:** Total prescriptions for antidepressants grew from 10.9 million in 1999 to 19.3 million in 2009, with only a temporary decline occurring in 2004-2005 which corresponds with the initial FDA warning. While the warnings applied to all antidepressants, differences in utilization patterns between classes are apparent. TCAs declined in use, while both SNRI and SSRI prescriptions increased over the decade, although SNRI utilization leveled-off after the 2007 expansion of the FDA blackbox warning that applied to young adults (18-24). **CONCLUSIONS:** Despite continuing expansion of the scope of the FDA blackbox warnings, overall antidepressant utilization increased over the decade, although the rate of increase appears to have slowed in the past two years.

PMH69
HEALTH CARE RESOURCE UTILIZATION AMONG PATIENTS WITH BIPOLAR DISORDER: RETROSPECTIVE DATA FROM A LARGE MULTINATIONAL LONGITUDINAL STUDY (WAVE-BD)

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**OBJECTIVES:** WAVE-bd (**W**ide **A**mbispecti**VE** study of the clinical management and burden of **b**ipolar **d**isorder [BD]) is ongoing to address limitations of longitudinal BD studies to date. As part of this study, healthcare utilization among patients with BD was assessed in a multinational BD patient cohort. **METHODS:** Multinational, multicenter, non-interventional, longitudinal study of patients diagnosed with BD with ≥1 mood event in the preceding 12 months (retrospective data collection from index mood event to enrollment, followed by a minimum of 9 months' prospective follow-up). Site and patient selection provided a representative sample of patients cared for in each country, including medical health centers, clinics, private settings, hospitals or specialized units. **RESULTS:** In total, 2880 patients (mean age 46.5 years [SD: 13.3]; 62% female) were recruited from 10 countries. During the retrospective period, 94.3% of patients received usual treatment for BD, which included atypical antipsychotics, anticonvulsants, antidepressants, lithium and electroconvulsive therapy. Psychiatric visits were the most frequently used healthcare resource, with 8.62 ± 8.25 and 0.96 ± 3.16 (mean ± SD) programmed and spontaneous visits per patient-year, respectively. There was a mean of 1.46 ± 5.67 visits to the psychologist per patient-year. Hospitalization rates since diagnosis and index event were 0.45 ± 0.83 and 0.34 ± 1.14/patient-year, respectively (time [years] since diagnosis was 11.13 ± 10.39 overall; BD-I: 11.97 ± 10.46; BD-II: 9.46 ± 9.95). There were 0.49 ± 4.54, 0.74 ± 4.31 and 0.14 ± 0.68 group therapy, general practitioner and emergency department visits per patient-year since the index event, respectively. Overall, there were 85 ± 370 suicide attempts per 1000 patient-year. **CONCLUSIONS:** Resource use in this population with BD was considerable, indicating the high burden associated with BD in healthcare systems across different countries and healthcare settings, representative of everyday clinical practice. Study funded by AstraZeneca; Clinical Trials Registry: NCT01062607.

PMH70
WHAT DROVE THE DRAMATIC SLOWDOWN IN PSYCHIATRIC DRUG SPENDING GROWTH IN THE UNITED STATES

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**OBJECTIVES:** Prescription medications are a cornerstone of mental health treatment. From 1993 to 2003, drug spending was responsible for 46% of the increase in US mental health expenditures. Psychiatric drugs have also been a driver of spending on all medications, comprising 26% of Medicaid and 14% of private insurance drug spending. This study analyzes recent trends in psychiatric prescription drug spending. Potential drivers were evaluated: generic drug entry; prevalence of utilization; benefit plan design; drug safety concerns; comparative effectiveness research, and new product entry and indications. **METHODS:** Data were from the Substance Abuse and Mental Health Services Administration Spending Estimates and Thomson Reuter's MarketScan Commercial Database for 1997 through 2008 and from IMS Health. The SAMHSA estimates use similar definitions, data, and methods as the national health expenditure accounts produced by the CMS and are based primarily on nationally representative databases. SAMHSA drug spending was derived from the Medical Expenditure Panel Survey and checked against data from IMS Health. **RESULTS:** From 1997 to 2001, national psychiatric medication spending grew by more than 20% annually. Data from 2001 through 2008 show a dramatic and steady decline in the spending growth. The average annual growth in the users per enrollee declined from 7% to 2% from 1997-2001 to 2001-2008. The average annual increase in costs per day declined from 8% to 2%. Days per user declined only slightly from 3% to a 2%. A key contributor to the slower price growth was generic entry, particularly generic antidepressants, encouraged by formulary design. Generic medications grew from 36% to 70% of all psychiatric prescriptions from 1997 to 2008. Drug safety concerns also contributed to the spending slow down. Major comparative effectiveness studies did not have a large impact on spending growth. **CONCLUSIONS:** Past high growth in psychiatric drug spending arising from growth in utilization of branded medications has declined significantly, which may have implications for access and new product investment.